

REMARKS

Reconsideration of the application is requested.

Claims 1-6, 9, and 11-42 are now in the application. Claims 1-6, 9, and 11-26 are subject to examination and claims 27-42 have been withdrawn from examination. Claims 1, 2, 6, 9, 11, 13, 14, 16, 18, 20, 23, and 24 have been amended. Claims 7, 8, and 10 have been canceled to facilitate prosecution of the instant application.

Under the heading "Claim Rejections – 35 USC § 112" on page 2 of the above-identified Office Action, claims 6, 7, 15, and 23-26 have been rejected as being indefinite under 35 U.S.C. § 112, second paragraph.

The limitations in claim 7 now appear in claim 1. The term "different ones" has not been used.

The Examiner stated that it is unclear whether the controllable excursion mechanism for the layer compensating device in claim 6 is the same one defined in claim 4. Claim 6 has been rewritten to avoid such confusion. Support for the changes can be found by referring to claims 4-5.

The Examiner stated that claims 15 and 25 are incomplete for omitting essential structural cooperative relationships of elements. The Examiner

further stated that the intended use of the central data processing unit posed no specific structural limitations to the apparatus. MPEP 2172.01 is copied below.

2172.01 Unclaimed Essential Matter [R-1]

A claim which omits matter disclosed to be essential to the invention as described in the specification or in other statements of record may be rejected under 35 U.S.C. 112, first paragraph, as not enabling. *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). See also MPEP § 2164.08(c). Such essential matter may include missing elements, steps or necessary structural cooperative relationships of elements described by the applicant(s) as necessary to practice the invention. In addition, a claim which fails to interrelate essential elements of the invention as defined by applicant(s) in the specification may be rejected under 35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention. See *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976); *In re Collier*, 397 F.2d 1003, 158 USPQ 266 (CCPA 1968). >But see *Ex parte Nolden*, 149 USPQ 378, 380 (Bd. Pat. App. 1965) ("[I]t is not essential to a patentable combination that there be interdependency between the elements of the claimed device or that all the elements operate concurrently toward the desired result"); *Ex parte Huber*, 148 USPQ 447, 448-49 (Bd. Pat. App. 1965) (A claim does not necessarily fail to comply with 35 U.S.C. 112, second paragraph where the various elements do not function simultaneously, are not directly functionally related, do not directly intercooperate, and/or serve independent purposes.).

Applicants do not understand why the Examiner has rejected these claims.

The Examiner first states that essential structural cooperative relationships have been omitted, and then secondly states that the intended use of the central processing unit posed no structural limitations. With regard to the first statement, applicants do not believe that there are any missing structural relationships. If the Examiner disagrees, applicants ask the Examiner to identify what essential element of the invention, which has been defined in the specification, is not included in the claims.

With regard to the second statement, applicants believe that the Examiner may have issue with the fact that the central data processing unit is functionally related to the compensating device and the layer-compensating device. There is nothing inherently wrong with a functional limitation as MPEP 2173.05 (g) specifies below:

2173.05(g) Functional Limitations [R-3]

A functional limitation is an attempt to define something by what it does, rather than by what it is (e.g., as evidenced by its specific structure or specific ingredients). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper. *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971).

A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step. >In *Innova/Pure Water Inc. v. Safari Water Filtration Sys. Inc.*, 381 F.3d 1111, 1117-20, 72 USPQ2d 1001, 1006-08 (Fed. Cir. 2004), the court noted that the claim term "operatively connected" is "a general descriptive claim term frequently used in patent drafting to reflect a functional relationship between claimed components," that is, the term "means the claimed components must be connected in a way to perform a designated function." "In the absence of modifiers, general descriptive terms are typically construed as having their full meaning." *Id.* at 1118, 72 USPQ2d at 1006. In the patent claim at issue, "subject to any clear and unmistakable disavowal of claim scope, the term 'operatively connected' takes the full breath of its ordinary meaning, i.e., 'said tube [is] operatively connected to said cap' when the tube and cap are arranged in a manner capable of performing the function of filtering." *Id.* at 1120, 72 USPQ2d at 1008.<

Whether or not the functional limitation complies with 35 U.S.C. 112, second paragraph, is a different issue from whether the limitation is properly supported under 35 U.S.C. 112, first paragraph, or is distinguished over the prior art. A few examples are set forth below to illustrate situations where the issue of

whether a functional limitation complies with 35 U.S.C. 112, second paragraph, was considered.

It was held that the limitation used to define a radical on a chemical compound as "incapable of forming a dye with said oxidizing developing agent" although functional, was perfectly acceptable because it set definite boundaries on the patent protection sought. *In re Barr*, 444 F.2d 588, 170 USPQ 33 (CCPA 1971).

In a claim that was directed to a kit of component parts capable of being assembled, the Court held that limitations such as "members adapted to be positioned" and "portions . . . being resiliently dilatable whereby said housing may be slidably positioned" serve to precisely define present structural attributes of interrelated component parts of the claimed assembly. *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976).

Applicants believe the functional limitations used in defining the operation of the central data processing unit are entirely proper in accordance with MPEP 2173.05(g).

A similar situation exists with regard to the rejection of claim 26. Applicants believe the functional limitation used in defining the operation of the drawing installation is permissible in accordance with MPEP 2173.05(g).

Claims 23 and 24 have been amended to comply with 35 U.S.C. 112, second paragraph. Support for the changes can be found in these claims as originally presented. Additional support may be found at page 39, lines 1-10 of the specification.

It is accordingly believed that the claims meet the requirements of 35 U.S.C. § 112, second paragraph. The above-noted changes to the claims are provided

solely for clarification or cosmetic reasons. The changes are neither provided for overcoming the prior art nor do they narrow the scope of the claim for any reason related to the statutory requirements for a patent.

Under the heading "Claim Rejections – 35 USC § 102" on page 4 of the above-identified Office Action, claims 1-3, 7-10, 14, 16-22, and 26 have been rejected as being fully anticipated by U.S. Patent No. 3,847,579 to Fulk et al. under 35 U.S.C. § 102.

Claim 1 has been amended to include the limitations of claims 7, 8, and 10. The word, "separately" has been added to the limitation previously appearing in claim 10. The limitation now reads:

said deflection roller held on said dancing arm such that said deflection roller, in addition to performing a pivoting movement about the mounting point of said dancing arm, can oscillate separately with respect to the pivoting movement.

Support for the change can be found by referring to the application at page 37, lines 15-21 and at page 15, lines 8-17, from which one of ordinary skill in the art would see that the pivoting movement, due to the pivotal fastening, and the oscillating movement, due to the elastic material, are two separate movements.

The Examiner has alleged that Fulk et al. disclose both a pivoting movement and an oscillating movement with respect to the pivoting movement. Applicants

disagree. Fulk et al. only disclose a pivoting movement. The oscillating movement referenced by the Examiner is simply a damped upward and downward movement about the pivot axis. Applicants believe that the amendment to claim 1, namely, "said deflection roller held on said dancing arm such that said deflection roller, in addition to performing a pivoting movement about the mounting point of said dancing arm, can oscillate separately with respect to the pivoting movement", makes it clear that the oscillating movement cannot be the same movement as the pivoting movement. Applicants believe that claim 1 is patentable.

Under the heading "Claim Rejections – 35 USC § 103" on page 6 of the above-identified Office Action, claim 4 has been rejected as being obvious over U.S. Patent No. 3,847,579 to Fulk et al. in view of Published Patent application US 2005/0126227 to Collaro under 35 U.S.C. § 103.

Applicants believe that claim 4 is patentable for the reasons specified above in regard to claim 1.

Under the heading "Claim Rejections – 35 USC § 103" on page 6 of the above-identified Office Action, claims 5, 6, and 15 have been rejected as being obvious over U.S. Patent No. 3,847,579 to Fulk et al. in view of Published Patent application US 2005/0126227 to Collaro and further in view of U.S. Patent No. 4,130,248 to Hendrix et al. under 35 U.S.C. § 103.

Applicants believe that claims 5, 6, and 15 are patentable for the reasons specified above in regard to claim 1.

Under the heading "Claim Rejections – 35 USC § 103" on page 7 of the above-identified Office Action, claims 10-13 have been rejected as being obvious over U.S. Patent No. 3,847,579 to Fulk et al. in view of U.S. Patent No. 3,650,717 to Canfield under 35 U.S.C. § 103. Applicants respectfully traverse.

The Examiner has alleged that it would have been obvious to use the elastic material suggested by Canfield in the apparatus of Fulk et al. in order to provide proper tension on the fiber and to provide a dancing arm that can withstand the strain due to the tension. Applicants believe that Canfield does not teach using an elastic material in order to provide proper tension on the fiber, nor do they teach that such an elastic arm could be utilized to withstand a strain due to tension.

Canfield teaches a transducer arrangement 50 including a flexible leg 52 that contacts the strand 22 of moving material. The flexible leg 52 has two strain gauges 71, 72 mounted thereon, which measures stresses and strains induced in the leg 52 by the strand 22 (column 7, lines 4-14). A bridge circuit 70 generates a signal using the strain gauges 71, 72, and this signal is used to regulate the rotational speed of the collect 35 (column 7, lines 14-73).

It should be clear that the flexibility of the leg 52 is provided so that strain gauges 71, 72 can be used to provide a signal indicating the tensile force T in the strand 22 (See column 7, lines 14-21, in particular). This signal is used to regulate the speed of the collector 35. There is no teaching or suggestion that the flexible leg 52 could be used to actually impart a tension on the strand 22.

There is also no teaching in the prior art that there is a problem with strains being placed on arms by fibers and that the flexible feature of leg 52 will somehow be advantageous in absorbing such strains.

In view of the preceding discussion, applicants believe it should be clear that the motivation asserted by the Examiner for combining the prior art does not seem to be consistent with the teaching of Canfield.

On lines 6-8 of page 8 of the Office action, it appears that the Examiner has also alleged that Canfield teaches an oscillating movement and a pivoting movement. Applicants disagree. A securing block 53 (see column 3, lines 58-64) fixes a remote end of leg 52 to the plate 43. There is no pivoting movement, but rather only a flexing movement since the end of the leg 52 is fixedly attached. Applicants therefore believe that even if the teachings were combined, for some reason, the invention, defined by claim 1 would not have been obtained because Canfield does not teach a separate pivoting and oscillating movement.

The Examiner has also alleged that Canfiled teaches a deflection roller.

Applicants do not believe that the transducer 50 including the leg 52 and graphite shoe 55 qualify as a deflection roller.

Under the heading "Claim Rejections – 35 USC § 103" on page 8 of the above-identified Office Action, claims 23-25 have been rejected as being obvious over U.S. Patent No. 3,847,579 to Fulk et al. under 35 U.S.C. § 103.

Applicants believe that claims 23-25 are patentable for the reasons specified above in regard to claim 1.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claim 1.

In view of the foregoing, reconsideration and allowance of claims 1-6, 9, and 11-26 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

Petition for extension is herewith made. The extension fee for response within a period of three months pursuant to Section 1.136(a) in the amount of \$1020.00 in accordance with Section 1.17 is enclosed herewith.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Stermer LLP, No. 12-1099.

Respectfully submitted,

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MPW:cgm

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